Massive Transfusion to Rapid Transfusion Protocol

The need…

For an evidenced-based protocol providing for the rapid administration of blood products to hypotensive and/or bleeding trauma patients early in the resuscitation process prior to their transfer to a higher level of care. This protocol should be based on a facility's blood bank availability of products such as the number of O negative PRBC's and available units of FFP. Many critical access hospitals/trauma receiving facilities providing initial patient resuscitation and stabilization do not have the resources to consider an actual "Massive Transfusion Protocol" (MTP). It is nearly impossible to find information on "Rapid Transfusion Protocols" (RTP) other than on-line message boards from small hospitals asking for help in developing something to fit their rural needs. Trauma centers many times initiate their MTP's after 4-6 units of PRBC's have been given, the amount of which may have already nearly exhausted the supply in a small hospital. The addition of TXA to these protocols should be considered depending on whether the facility has TXA available and if the patient meets administration criteria.

The availability…

Determine the capability of your facility in providing specific blood product replacement (units of PRBC's and FFP), along with appropriate coag studies (PT, PTT, INR) and a cross-match. For example, Sheridan Memorial Hospital (SMH) has 12 units of PRBC's (4 of which are O-negative), and 6 units of FFP available; along with the capability to draw appropriate coag studies prior to initiation of the RTP. At the time of trauma team activation, the FFP warming bath is turned on so it is available if the need arises for thawing of 2 units, while the first unit of O-negative is rapidly transfused.

Adapting a MTP protocol to fit the rural facility

SMH utilized the MTP that Billings Clinic has in place as a base for which to develop a RTP. We are an affiliate facility of BC and they frequently are on the receiving end of our trauma patient transfers. Therefore, it made sense to use their existing protocol and revise it to fit a CAH. Once the RTP was developed, it was reviewed by the SMH Trauma Director, Billings Clinic ED, Trauma, and Flight Program physicians for suggested feedback. Once approved, it was then put into place for use. SMH does have TXA available, so a separate guideline was developed regarding administration of this medication, which has been incorporated into the RTP activation procedure. At this time the RTP has yet to be initiated. Once it has been utilized, a QA will be done addressing its ease of use and effectiveness through follow-up with the receiving facility.